



1, For AF
Attorney Docket No. 016906-0385
Application No. 10/528,566

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Reinhold BURR *et al.*
Title: **AIR INLET, IN PARTICULAR FOR A MOTOR VEHICLE**
Appl. No.: 10/528,566
International Filing Date: 9/19/2003
371(c) Date: 12/14/05
Examiner: Samantha A. Miller
Art Unit: 3749
Confirmation Number: 6385

REPLY BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Under the provisions of 37 CFR § 41.41, Appellant submits this Reply Brief on Appeal to respond to the Examiner's Answer mailed on March 21, 2008.

The Examiner maintains that claims 15-27 are anticipated by U.S. Patent 5,101,883 ("Kinmartin") and that claims 28-37 are rendered unpatentable over Kinmartin in view of U.S. Patent 6,575,701 ("Kamiya"). The Examiner is incorrect, because (1) Kinmartin does not teach or suggest each and every element of claim 15; (2) the combination of Kinmartin and Kamiya is improper; (3) no combination of Kinmartin and Kamiya teaches or suggests each and every element of claim 28; and (4) no combination of Kinmartin and Kamiya teaches or suggests each and every element of claim 33.

Kinmartin does not teach or suggest all the features of claim 15

Claim 15 recites, among other things, an air-guiding device comprising a plurality of subducts for dividing air in the air-guiding device, and an outflow region with an outer

circumferential region and a middle region, wherein one subduct leads to the middle region and another subduct leads to the outer circumferential region. Kinmartin does not teach or suggest this combination of features because Kinmartin does not teach or suggest **any single outflow region** with an outer circumferential region and a middle region, nor does Kinmartin disclose one subduct going to one of these regions and a second subduct going to the other region.

The PTO answers Applicant's arguments by asserting that the entire modular duct assembly 12 of Kinmartin is now considered to be the outflow region of claim 15. (Response to Argument section, paragraph (i) on pages 7-8 of the Examiner's Answer.) First, this position is inconsistent with the grounds of rejection in which the modular duct assembly 12 of Kinmartin is interpreted to be the air-guiding device of claim 12 (which comprises a plurality of subducts and an outflow region). (Ground of Rejection section on pages 3-4 of the Examiner's Answer.) Second, it is simply not reasonable to interpret the entire modular duct assembly 12 of Kinmartin as the outflow region of claim 15 because the modular duct assembly 12 of Kinmartin has an air inlet at a mouth 38, outer walls, and air outlets at bents 46a and 46b. One with ordinary skill in the art would not include outer walls and an air inlet to be part of an outflow region because such components run contrary to the very name of such a region, i.e., a region for the outflow of air. To interpret the entire air-guiding device 12 of Kinmartin to be the outflow region of claim 15 would essentially be interpreting the term "outflow" right out of the claim.

Based on the misinterpretation of the entire modular duct assembly 12 of Kinmartin to be the outflow region of claim 15, the PTO then asserts that the vertical passage 58 of Kinmartin is considered to be the middle region of claim 15 while the discharge vents 46a and 46b of Kinmartin are considered to be the outer circumferential region of claim 15. (Response to Argument section, paragraph (i) on pages 7-8 of the Examiner's Answer.) If the outflow region of claim 15 were interpreted properly, the vertical passage 58 and the discharge vents 46a and 46b cannot be the middle and outer circumferential regions, respectively, of claim 15 because the vertical passage and discharge vents are not part of a single outflow region. Furthermore, even if the entire modular duct assembly 12 of Kinmartin were interpreted to be the outflow region (and Applicant maintains that it cannot),

the discharge vents 46a and 46b cannot be considered outer circumferential regions because the discharge vents 46a and 46b are not regions that partially surround the vertical passage, as connoted by the term “outer circumferential.” Merely stating that the discharge vents 46a and 46b are outer circumferential regions because they are placed away from the vertical passage 58 is essentially attributing no meaning to the terms “outer circumferential.”

It is noted that the PTO asserts that the claims do not recite that the outer circumferential region does not partially surround the middle region. (Response to Argument section, paragraph (iv) on pages 8-9 of the Examiner’s Answer.) However, one of ordinary skill in the art would understand that the modifiers “outer circumferential” would indicate a boundary around the middle region of the outflow region, and the vents 46a and 46b of Kinmartin are not in such a relationship with the vertical passage 58 of Kinmartin.

Because Kinmartin does not teach or suggest an air-guiding device comprising a plurality of subducts for dividing air in the air-guiding device and an outflow region with an outer circumferential region and a middle region, wherein one subduct leads to the middle region and another subduct leads to the outer circumferential region, claim 15 is allowable over the prior art.

Claims 28 and 33 are allowable because there is no reason to combine the teachings of Kinmartin and Kamiya

Claim 28 recites, among other things, an air-guiding device comprising a plurality of subducts for dividing air in the air-guiding device, wherein one subduct has a coiled or elongated, helical region. Claim 33 recites, among other things, an air-guiding device comprising a plurality of subducts for dividing air in the air-guiding device, and wherein one of the subducts is configured to impart a spot action to the air at an exit of the air duct and another of the subducts is configured to impart a swirl to the air at the exit of the air duct. Kinmartin does not teach or suggest these features. Kamiya does not cure the deficiencies of Kinmartin because there is no reason to combine the blower casing to the distribution duct of Kinmartin.

The PTO asserts that it would have been obvious to connect the blower casing of Kamiya which is spiral to the end of the outflow region of Kinmartin (Response to Argument section, paragraph (v) on page 9 of the Examiner’s Answer) in order to blow air faster and to obtain more efficient airflow (Grounds of Rejection on page 7 of the Examiner’s Answer).

To support such an assertion, the PTO states that Kamiya teaches the improvement of performance by producing more airflow for less power and by reducing noise. (Response to Argument section, paragraph (ix) on page 11 of the Examiner's Answer.)

To take a step back, the PTO is asserting that a blower casing should be placed on the outlet of a distribution duct so that more airflow can be produced for less power. Such an assertion defies the law of physics because the person skilled in the art knows that extending the length of an airflow passage and twisting it in a helical shape does not provide for more efficient airflow, but rather produces a less efficient airflow. Consequently, the motivation alleged by the PTO for combining the references instead betrays the improper hindsight nature of basis for making the stated combination of references with respect to claim 28.

Furthermore, the assertion that Kamiya discloses that the blower casing produces more airflow for less power and reduces noise is completely inapplicable in the proposed combination because Kamiya is disclosing the use and benefits of the blower casing in a blower application, not as a distribution duct or as an obstruction over a distribution duct. Indeed, the fact that the blower casing of Kamiya is being used in a completely different context from which it is designed makes the proposed modification improper. According to MPEP §2143, if each and every element does not perform the same function as it does separately, the rationale of combining prior art elements cannot sustain an obvious rejection.

The PTO has stated that, in relation to the different functions of the blower casing and the distribution duct, Kinmartin teaches a distribution duct 12 being connected to a blower casing at 10. (Response to Argument section, paragraph (viii) on page 10 of the Examiner's Answer.) First it is noted that Kinmartin discloses a heater, evaporator and blower assembly 10 for producing two streams of temperature controlled air, coupled to a modular duct assembly 12. Obviously, the heater, evaporator, and blower assembly 10 has a different function from the modular duct assembly 12. (Column 2, lines 28-34 of Kinmartin.) If it were otherwise, there would be no need for both assemblies. Indeed, the fact that the assemblies 10 and 12 have different functions reinforces Applicant's position that the use of the blower casing of Kamiya as a duct would be changing the function of the blower casing.

Because the casing of Kamiya is being used differently from what it was designed for and the alleged benefit for adding the casing of Kamiya to the device of Kinmartin would not

be realized from the proposed modification, there is no reason to combine the teachings of Kinmartin and Kamiya, and the rejections of claims 28 and 33 should be withdrawn.

Kinmartin and Kamiya does not teach or suggest all the features of claim 28

Claim 28 recites, among other things, an air-guiding device comprising a plurality of subducts for dividing air in the air-guiding device, wherein one subduct has a coiled or elongated, helical region. No combination of Kinmartin and Kamiya teaches or suggests these features. The PTO asserts that it would have been obvious to connect the blower casing of Kamiya which is spiral to the end of the outflow region of Kinmartin. (Response to Argument section, paragraph (v) on page 9 of the Examiner's Answer.) Further, the PTO asserts that a subduct is defined as a sub section of a duct and that such a definition would allow the sequential arrangement of the blower casing of Kamiya over the channels 36a and 36b of Kinmartin. (Response to Argument section, paragraph (v) on page 9 of the Examiner's Answer.) However, the PTO is ignoring the language of the claims. Claim 28 recites "wherein the air-guiding device comprises a plurality of subducts for dividing air in the air-guiding device, and wherein one subduct has a coiled or elongated, helical region." A sequential arrangement of subsections of ducts is not capable of dividing air. To be capable of dividing air, the subducts need to be in a parallel arrangement, not sequential. Because the sequential arrangement of subducts proposed by the PTO does not divide airflow, no combination of Kinmartin and Kamiya teaches or suggests an air-guiding device comprising a plurality of subducts for dividing air in the air-guiding device, wherein one subduct has a coiled or elongated, helical region. Thus, claim 28 is allowable over the prior art.

Kinmartin and Kamiya does not teach or suggest all the features of claim 33

Claim 33 recites, among other things, an air-guiding device comprising a plurality of subducts for dividing air in the air-guiding device, and wherein one of the subducts is configured to impart a spot action to the air at an exit of the air duct and another of the subducts is configured to impart a swirl to the air at the exit of the air duct. No combination of Kinmartin and Kamiya teaches or suggests these features. The PTO asserts that the channel 36a of Kinmartin imparts a spot action and channel 36b "inherently" imparts a swirl. (Response to Argument section, paragraph (vii) on page 10 of the Examiner's Answer.) This analysis is erroneous because (1) channels 36a and 36b have the same overall structure so it is

not possible for one to provide a spot action while another imparts a swirl. Either they both impart a spot action or they both impart a swirl. Furthermore, there is nothing to teach or suggest that a swirl is imparted at the defogger vent 46b. At best, the walls of the defogger vent 46b merely direct the airflow in a particular direction but there is nothing to teach or suggest that a swirl is necessarily imparted to the air. Because there is nothing to suggest that the channels of Kinmartin impart a swirl to the air, no combination of Kinmartin and Kamiya teaches or suggests all the features of claim 33.

Conclusion

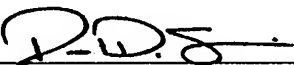
The PTO has not established that claims 15-27 are anticipated by Kinmartin because Kinmartin does not teach or suggest any single outflow region with an outer circumferential region and a middle region.

Claims 28-37 are not rendered obvious by Kinmartin and Kamiya because, (1) as a threshold matter, the combination of these two references is improper for the reasons explained above, and (2) no combination of Kinmartin and Kamiya teaches or suggests all of the subject matter defined in either claim 28 or claim 33.

For at least reasons, Appellant respectfully solicits the Honorable Board of Patent Appeals and Interferences to reverse the rejection of the pending claims and pass this application on to allowance.

Respectfully submitted,

Date 5/2/08

By 

FOLEY & LARDNER LLP
Customer Number: 22428
Telephone: (202) 672-5540
Facsimile: (202) 672-5399

Paul D. Strain
Registration No. 47,369

Matthew J. Kremer
Registration No. 58,671